

Claims:

1. A method for calendering paper and board when manufacturing coated grades of paper or board, comprising

- calendering at least one of the surfaces of an uncoated base material web,

- applying at least one layer of coating at least onto the calendered surface of the base web, and

- calendering at least the coated surface of the base web,

characterized by

- calendering the uncoated surface of the base web by means of a shoe calender having a nip length of at least 50 mm, and

- calendering the coated surface of the base web by means of a calender having a nip length of 50 mm at the most.

2. The method of claim 1, characterized by calendering the uncoated surface of the base web by means of a shoe calender having a nip length of 50 to 270 mm.

3. The method of claim 1, characterized by calendering the coated surface of the base web by means of a belt calender whose nip is formed between two rolls.

4. The method of claim 1, characterized by calendering the coated surface of the base web by means of a belt calender whose nip is formed by means of a short shoe.

5. The method of any one of the previous claims,
characterized by calendering the uncoated surface of the base
web by means of a shoe calender whose shoe is divided into
sectors in the travelling direction of the web, the
5 compression load of the sectors being independently
controllable.

6. The method of claim 2, **characterized** in that the maximum
pressure in the treatment zone is 0 to 15 MPa, preferably 4
10 to 10 MPa.

7. The method of claim 1 or 6, **characterized** by taking the
web to the first calender in a state in which the glass
transition temperature of at least its surface fibres has
15 been reached.

8. The method of claim 7, **characterized** by bringing the web
to glass transition temperature by the aid of prewetting or
presteaming, or the conditions in the calender zone, such as
20 the temperature of the backing roll and prewetting.

9. An arrangement for calendering paper and board in the
manufacture of coated grades of paper or board, the
arrangement comprising

25 - at least one first calender for treating at least
one of the surfaces of an uncoated base material
web,

30 - means for treating at least the calendered surface
of the base web with at least one coating mix layer,
and

35 - at least one second calender for treating at least
the coated surface of the base web,

characterized in that

- the first calender is a shoe calender having a nip length of at least 50 mm, and

- the second calender is a calender having a nip length of 50 mm at the most.

10. The arrangement of claim 9, **characterized** in that the first calender is a shoe calender having a nip length of 50 to 270 mm.

11. The arrangement of claim 9, **characterized** in that the second calender is a belt calender where the nip is formed between two rolls.

12. The arrangement of claim 9, **characterized** in that the second calender is a belt calender in which the nip is formed by means of a short shoe.

13. The arrangement of any one of the previous claims 9 to 12, **characterized** in that the first calender is a shoe calender whose shoe is divided into sectors in the travelling direction of the web, the compression load of the sectors being independently controllable.